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which can be plated. In this thin film magnetic head, heat generated from the coil is released to the first radiating layer to suppress thermal expansion of the recording section due the heat of the coil. When the first radiating layer is  
5 in contact with the lower core layer, a magnetic flux of the lower core layer flows into the first radiating layer to change the inductance of the recording section, thereby undesirably change the characteristics of the recording section. Although the facing area between the first  
10 radiating layer and the conductor layer of the coil is preferably as large as possible, the first radiating layer may oppose a portion of the conductor layer of the coil.

A thin film magnetic head of the present invention comprises a lower core layer, an upper core layer, a  
15 recording section comprising a nonmagnetic gap layer formed between the lower and upper core layers near a surface facing a recording medium, a connecting portion for magnetically connecting the lower core layer and the upper core layer in the rear of the recording section, a coil comprising a  
20 conductor layer wound in a spiral planar shape around the connecting portion, an upper shield layer provided below the lower core layer with a separating insulating layer provided therebetween and made of an insulating material, a reproducing magnetoresistive element provided below the upper  
25 shield layer near the surface facing the recording medium, a lower shield layer provided below the magnetoresistive element with an insulating layer provided therebetween, and at least one of first, second and third radiating layers is